

**Waste Management of New York –
123 Varick Avenue
Draft Upland Site Summary**

WASTE MANAGEMENT OF NEW YORK – 123 VARICK AVENUE (DAR SITE ID #46)

Address: 123 Varick Ave., Brooklyn, New York 11237
Tax Lot Parcel(s): Brooklyn Block 2974, Lot 0051
Latitude: 40.709722
Longitude: -73.930556
Regulatory Programs/
Numbers/Codes: NYSDEC Facility No. 24W89, NYSDEC Part 360 Permit Nos. 2-6104-00013/00001, 2-6101-00013/00001, and 2-6101-00010, SDPES No. NY-0201260, SIC Code 4953, EPA No. NYD982744815, PBS No. 2-602618, NYSDEC Spill Nos. 0512331, 9805562, and 0204059.
Analytical Data Status: Electronic Data Available Hardcopies only
 No Data Available

1 SUMMARY OF CONSTITUENTS OF POTENTIAL CONCERN (COPCs) TRANSPORT PATHWAYS TO THE CREEK

The current understanding of the transport mechanisms of contaminants from the upland portions of the Waste Management of New York – 123 Varick Avenue facility, also known as the Varick II site (site), to Newtown Creek is summarized in this section and Table 1 and supported by the following sections.

Overland Transport

The site is located adjacent to English Kills, a tributary to Newtown Creek. The site slopes down to the west towards the English Kills. Overland sheet runoff not captured by on site infrastructure may transport eroded surface soils and associated COPCs from the upland portion of the site to the creek. A notice of violation (NOV) was issued for leachate entering surface waters at the site (NYSDEC 2001b). No additional information regarding this incident was identified in reviewed records. This is a historically complete and currently potentially complete pathway.

Bank Erosion

The site is located adjacent to English Kills, a tributary to Newtown Creek, with a bulkhead currently present along the entire edge of water and paving covering the upland surface adjacent to the bulkhead. There is insufficient evidence to make a historical or current pathway determination.

Groundwater

The site is located adjacent to English Kills, a tributary to Newtown Creek. Available files did not contain groundwater quality information for this site. There is insufficient evidence to make a historic or current pathway determination.

Overwater Activities

The site is adjacent to English Kills, a tributary to Newtown Creek. No overwater activities were identified in the reviewed records. There is insufficient evidence to make a historical or current pathway determination.

Stormwater/Wastewater Systems

A State Pollutant Discharge Elimination System (SPDES) permit authorized site stormwater and wastewater discharges to English Kills from 2001 to 2009 and stormwater discharge from 2001 to 2011 (NYSDEC 2001a). This is a potentially complete historic pathway and a complete current pathway.

Wastewater and stormwater from the site flow into separate municipal sewer systems. Although sanitary discharges from the site flow into a separate local municipal system, it is likely that the separate local system flows into a larger combined system prior to reaching the treatment plant (NYCDEP 2007). When the combined flows exceed the system's capacity, untreated combined sewer overflows (CSOs) are discharged to Newtown Creek. There is insufficient evidence to make a historical or current wastewater discharge pathway determination.

Air Releases

No air facility system (AFS) identification number was found for this site in reviewed records. NOV's for excessive dust at the site were issued by the New York City Department

of Sanitation on five separate occasions between 1998 and 2000. No additional data regarding air releases were available in records reviewed while preparing this summary. There is insufficient evidence to make a historical or current pathway determination.

2 PROJECT STATUS

No available files containing environmental investigations or remedial activities were identified for this site. A New York State Department of Environmental Conservation (NYSDEC) Site Code was not found for this site.

The site is an authorized solid waste and construction and demolition (C&D) debris transfer station with the associated NYSDEC ID Nos.: 2-6104-00013, 2-6101-00013/00001, and 2-6101-00010. Copies of the permits were not available in reviewed material.

The site is currently classified as a Resource Conservation and Recovery Act (RCRA) small quantity generator (SQG), meaning it generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time. Historically, the site has been classified as a RCRA Conditionally Exempt SQG (2006), a Large Quantity Generator (2002), not registered (2002), a SQG (1998), and Unverified (1995). (EDR 2010)

3 SITE OWNERSHIP HISTORY

Respondent Member:

Yes No

Owners	Years	Occupant	Types of Operations
	ca. 1933	Morgan Sand and Gravel Company	Unknown
Highway Improvement and Repair Company	Unknown – 1947	Highway Improvement and Repair Company	Manufactured asphalt
Albert Pipe Supply Company, Inc.	1947 – 1981	Unknown	Unknown
Unknown	1947 – about 1965	Albert Pipe Supply Company, Inc.	Possibly steel pipe fabrication
Unknown	About 1965 – 1988	Tubeco, Inc.	Steel pipe fabrication

Owners	Years	Occupant	Types of Operations
Alintube Properties, Inc. (formerly Albert Realty Company Inc.)	1981 – 1988	Tubeco, Inc.	Steel pipe fabrication
Allied Sanitation, Inc.	1988 – 1990	Unknown	Unknown
Unknown	1988 – ca. 1996	Allied Sanitation	Waste management and recycling
Unknown	ca. 1990 – ca. 1996	Star Recycling, Inc.	Unknown
New York Industrial Development Agency	1990 – 2004	Unknown	Unknown
Unknown	ca. 1996 – 2004	Waste Management Varick II, Transfer Station	Solid waste transfer station recyclables handling and recovery facility as of 1999 construction and demolition debris and putrescible waste processing facility
Waste Management of New York, LLC	2004 – present	Waste Management Varick II, Transfer Station	Construction and demolition debris and putrescible waste processing facility

Note:
Additional discussion and sources provided in Section 6.

4 PROPERTY DESCRIPTION

The site 3.8 acres along English Kills, a tributary to Newtown Creek. The property slopes towards English Kills from approximately 10 feet above mean sea level as shown on Figure 1. The eastern portion of the site is occupied by a building the western portion is a paved open area. The area surrounding the site is zoned for manufacturing with a railroad easement cutting across the southern portion of the property (NYCDOF 2012). Enequist Chemical Co., Inc. (DAR Site ID #8) is located across Varick Avenue from the site.

5 CURRENT SITE USE

The site currently operates as a C&D Debris transfer station serving the state of New York (NY) under the NYSDEC Permit No. 2-6104-00013/00001. The site is authorized to accept no more than 5,249 tons per day (tpd) of C&D debris and to operate 24 hours (hrs) a day,

Monday through Saturday (Waste Management Annual Reports 1998, 1999, 2000, 2001, 2002, 2003, and 2004). The following table summarizes the materials received and lists example annual quantities received:

Type of Material	1998 Total (tons)	2001	2004 Total (tons)
Asphalt Pavement	--	2,801	1,009
Concrete	157,521	39,146	9,240
Metal	46,164	8,844	--
Aluminum	418	--	--
Plastic	416	--	--
Paper	670	--	--
Rock	--	10,943	133
Roofing Shingles	--	5,564	2,776
Wood	1,654	--	455
Mixed Construction and Demolition Debris	892,356	560,637	336,676
Total Tons Received	892,356	585,565	350,289

Site operations include inbound trucks carrying C&D material entering the facility to be weighed on one of the two inbound truck scales. The contents of trucks are recorded. Each vehicle is then directed to the tipping area for C&D material and after the materials are tipped, the pile is inspected for unauthorized waste. Unauthorized wastes are removed from the pile and staged as appropriate. After the unauthorized waste has been removed, large items such as blocks of concrete, large chunks of wood and metals are removed from the waste stream. The remaining material is fed through the on-site process machinery to separate the material into various piles according to content and size for reuse. C&D residuals which cannot be reused are disposed of at approved landfills (Tams Consultants, Inc. 1999a)

6 SITE USE HISTORY

The first known business at the site was the Morgan Sand and Gravel Company (Sanborn 1933).

In 1947 the Highway Improvement and Repair Company sold the site to the Albert Pipe Supply Company. The Varick Avenue site had a two story office building, a garage, frame sheds, concrete hoppers and other buildings for manufacturing asphalt (NYT 1947).

The Albert Pipe Supply Company owned the parcel as well as adjacent lots (Sanborn 1965). Tubeco, Inc., a pipe fabrication business, operated at the site from at least 1965 until 1988 (NYS 1965; MacRae's 1988).

Allied Sanitation Inc. purchased the site in 1988 (Rhino Trust 1988). They operated a waste management and recycling business on the site (MacRae's 1994). Allied Sanitation Inc. also purchased two adjacent lots in 1990, block 2968 lots 1 and 20 from the Rhino Trust and merged them with the earlier site (Rhino Trust 1990).

Around 1990 Waste Management moved onto the site. The facility was known as the Varick II, Transfer Station. In 1999 the facility underwent improvements in the putrescible waste handling area including a steel push wall, a storage area for unauthorized waste in the northwest corner of the building, a catch basin runoff drainage system to the sanitary sewer, and a mist deodorant system with exhaust fans for ventilation. The C&D area contained water spray to minimize dust, a WRS mawler to reduce wood waste, a Continental Biomass Industries (CBI) grinder to reduce general C&D waste and a tarping rack for non-putrescible transfer trailers (Tams Consultants, Inc. 1999b).

In 2000, the two lots purchased in 1990 by Allied Sanitation were subject to eminent domain and the land was used by the Department of Sanitation, New York City garage (Supreme Court of the State of New York 2000). As a result of the changes, Waste Management constructed new scales at the site and a new concrete bulkhead (Waste Management 2002).

In 2001, the throughput capacity for 250 tons per day of putrescible solid waste (PSW) was removed from the Site's permit and was added to the Waste Management of New York, LLC

facility at 215 Varick Avenue in Brooklyn. At this time, the site was also permitted to utilize an existing rail spur to transport processed and unprocessed C&D from the facility. With this, NYDEC also approved the installation of a rail scale at the rail loading area (Cryan 2001).

7 CURRENT AND HISTORICAL AREAS OF CONCERN AND COPCs

The current understanding of the historical and current potential upland and overwater areas of concern at the site is summarized in Table 1. The following sections provide brief discussion of the potential sources and COPCs at the site requiring additional discussion.

Areas of concern at the site include areas in which asphalt plant, sand and gravel company, steel pipe fabrication, and waste handling occurred as well as petroleum storage areas and onsite aboveground storage tanks (ASTs; Tams Consultants, Inc. 1999b; EDR 2010). COPCs for the site include metals, semi-volatile organic compound (SVOCs), polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons, and volatile organic compounds (VOCs).

7.1 Uplands

The original putrescible waste handling area was located indoors but abandoned in 2001 (Tams Consultants, Inc. 1999b). This area of waste handling included a drainage system to collect runoff which was later discharged into the municipal sanitary sewer system (Tams Consultants, Inc. 1999b). This drainage system consisted of a catch basin to collect runoff, a trap to collect incidental debris, and an oil/water separator (Tams Consultants, Inc. 1999b). Unauthorized waste, which includes but is not limited to hazardous and regulated medical waste, asbestos, rubber tires, home appliances, and petroleum-contaminated soil, brought to the site is rejected and turned away. If the unauthorized waste was detected in a load after it has been dumped in the tipping area, it is removed and stored in the area designated for unauthorized waste. This storage area is located in the northwest corner of the building and is surrounded by a barrier to maintain separation from the rest of the site (Tams Consultants, Inc. 1999b). Receipt of unauthorized waste was identified in reviewed documents on multiple occasions. The incidents were reported and handled according to site procedures and no NOV's related to unauthorized waste were identified.

As part of the waste handling operations at the site, after C&D material has been accepted onsite machinery is utilized to separate, sort and process material for shipment. This machinery includes general construction equipment such as loaders along with specialized equipment such as the WRS Mawler and the CBI Grinder. The Mawler is a waste reducer capable of processing stumps, green yard waste, pallets, and other miscellaneous wood waste. The grinder is a waste reducer capable of processing C&D residue less than 6-inches, reducing it to 4-inches or less (Tams Consultants, Inc. 1999a).

Nine current and historic ASTs are associated with the Site and are detailed in the following table (EDR 2010):

Tank No.	Tank ID	Install Date	Date Last Modified	Status	Capacity (gallons)	Product	Type	Containment
001	50733	11/01/97	03/04/04	Closed – Removed	275	Unknown	Steel	None
002	50734	11/01/97	03/04/04	Closed – Removed	275	Unknown	Steel	None
003	50735	01/01/90	10/10/07	In Service	275	Unknown	Steel	Excavation/Trench Liner
004	50736	01/01/90	10/10/07	In Service	275	Used Oil	Steel	Excavation/Trench Liner
005	50737	10/01/90	03/04/04	Closed-Removed	1,000	Diesel	Steel	None
006	50738	01/01/90	9/29/09	Closed – Removed	1,100	Used Oil	Steel	Excavation/Trench Liner
007	53500	11/01/97	10/10/07	In Service	1,000	Unknown	Steel	Vault
008	53501	11/01/97	10/10/07	In Service	1,000	Unknown	Steel	Vault
009	54991	01/01/90	10/10/07	In Service	550	Unknown	Steel	Excavation/Trench Liner

Frequent site inspections have been conducted by NYSDEC since at least 1997 as part of the Solid Waste Management facility Inspection program. No indications of major violations were identified in the reviewed inspection documents. However, in a Record of Compliance Form dated August 31, 2001, several NOVs issued to the site by NYCDOH and NYSDEC were identified. The majority of the violations related to the discharge of dust into the air from normal C&D operations. These NOV were issued on September 1, 1998, February 7, 2000, April 5, 2000, October 19, 2000, and November 28, 2000 and no information on how these

were resolved was included in material reviewed (NYSDEC 2001c). A separate NOV was issued on January 26, 1999 for failure to comply with permit conditions. Leachate was seen entering surface waters and the penalty was paid (NYSDEC 2001b). No other information regarding this incident was identified in reviewed records.

7.2 Overwater Activities

The site is located adjacent to English Kills, a tributary to Newtown Creek. Information regarding overwater activities was not identified in documents available for review.

7.3 Spills

Three historic spills were identified and are presented in the following summary table. In all three incidents, no call back was required, no penalties were issued, and no resources were affected (EDR 2010).

NYSDEC Spill No.	Spill Date	Close Date	Material Spilled	Quantity (gallons)	Remarks
9805562	8/4/98	--	Diesel	20	Spill to soil. Tank failure at above location. Material contained and all recovered. No call back requested
0204059	7/18/02	7/30/02	Motor Oil	150	City and county waste truck was dumping at the transfer station and a container that was ill marked tipped over spilling the material – All State Power Vac. is in-route for cleanup – they should be able to recover all material because it spilled to concrete
0512331	1/24/06	3/28/06	Diesel	--	Spill to soil. Filter broke, cleanup crews are scheduled to arrive in the morning. Contained within the oil/water separator.

Note:

NYSDEC – New York State Department of Environmental Conservation

8 PHYSICAL SITE SETTING

8.1 Geology and Hydrogeology

Site-specific hydrogeologic information was not identified in documents available for review. The geologic setting for Newtown Creek consists of impermeable Precambrian and Paleozoic crystalline bedrock, overlain by the Upper Cretaceous Raritan formation, Magothy formation and Matawan Group (undifferentiated), unconsolidated Pleistocene deposits and upper Pleistocene glacial deposits and Holocene shore, beach salt-marsh deposits, and alluvium, along with local occurrences of artificial fill (Buxton et al. 1981; Soren and Simmons 1987). The primary areas of groundwater discharge are Newtown Creek and its tributaries and the East River (Misut and Monti 1999). In the vicinity of Newtown Creek, groundwater flow in the Upper Glacial aquifer is generally north and south towards the creek. With increased distance from the creek, groundwater will flow towards the nearest surface water body to discharge (Misut and Monti 1999). Incidences of perched groundwater may occur above the Upper Glacial Aquifer in some areas, particularly in formerly low-lying areas that have been filled. Groundwater flow at a specific property may differ from the regional pattern due to pumping for groundwater treatment or dewatering activities (Misut and Monti 1999), the presence of buried utilities, or other preferential pathways.

9 NATURE AND EXTENT (CURRENT UNDERSTANDING OF ENVIRONMENTAL CONDITIONS)

9.1 Soil

Soil Investigations

Yes No

Bank Samples

Yes No Not Applicable

Soil-Vapor Investigations

Yes No

Information regarding on-site soil investigations was not identified in documents available for review.

9.2 Groundwater

Groundwater Investigations

Yes No

NAPL Presence (Historical and Current)

Yes No

Dissolved COPC Plumes Yes No
Visual Seep Sample Data Yes No Not Applicable

Information regarding on-site groundwater investigations was not identified in documents available for review.

9.3 Surface Water

Surface Water Investigation Yes No
SPDES Permit (Current or Past) Yes No
Industrial Wastewater Discharge Permit (Current or Past) Yes No
Stormwater Data Yes No
Catch Basin Solids Data Yes No
Wastewater Data Yes No

9.3.1 Stormwater and Wastewater Systems

This site is located within the Newtown Creek Water Pollution Control Plant (WPCP) sewershed (NYCDEP 2007). From at least 2001 to 2009, treated stormwater from the building roof and wastewater from C&D operations discharged into English Kills through Outfalls 001 and 002 (NYSDEC 2001b). Each outfall was associated with a separate treatment system, consisting of a run off catch basin, a Vortex sedimentation chamber, an oil/water separator, and a sampling manhole. Each system was rated for a 2-year storm and for a storm greater than a 2-year event; overflow was diverted to drop manholes where it was then discharged, untreated, to English Kills via the outfalls. The treatment system layout is provided in Attachment 1 (NYSDEC 2001b).

In 2009, Savin Engineers on behalf of Waste Management of NY LLC submitted a permit modification request to discharge the treated industrial wastewater to the existing 24-inch NYCDEP sanitary sewer in Varick Avenue and to permanently seal Outfall 002. Storm drainage from the building roof was still to discharge to English Kills through Outfall 001 (Fiteni 2009). No record of this modification taking place, however, was identified in the reviewed records. A map of the sewer system layout is provided in Attachment 2.

Stormwater that falls on the rest of the site drains to the NYCDEP sewer through on-site infrastructure (Tams Consultants, Inc. 1999a).

9.3.2 SPDES Permit

A SPDES permit has been issued for this site since at least 2001 for the discharge of treated stormwater and wastewater to English Kills (NYSDEC 2001b). In 2009, a permit modification request was submitted to NYSDEC to discharge treated wastewater to the existing 24-inch NYCDEP sanitary sewer in Varick Avenue and to permanently seal Outfall 002. Storm drainage from the building roof was still to discharge to English Kills through Outfall 001. The most recent documentation of the permit in reviewed records indicated an expiration date of July of 2011 (EDR 2010). No violations were identified in the reviewed records. A summary of the SPDES permit issued in 2001 is provided in the following table:

Permit Type	Permit Number	Start Date	Outfalls	Volume	Frequency-Parameters (Limit; mg/L) ¹
SPDES	NY0201260	01/08/01 (Expired 01/08/06; renewal date unknown; expired again in 7/31/11)	001/002	--	TSS (50), BOD ₅ (50), Oil and Grease (15), NH ₄ (30), As (0.1), Ca (0.1), Mg (0.0008), Pb (0.5), Cr (0.1), Se (0.05), Benzene (0.05), Toluene (0.05), Ethyl Benzene (0.05), Xylenes (0.05)

Notes:

- 1 – All metals are in the total form.
- As – arsenic
- BOD₅ – biochemical oxygen demand
- Cr – chromium
- Mg – magnesium
- mg/L – milligrams per liter
- NH₄ – ammonium
- Pb – lead
- Se – selenium
- SPDES – State Pollutant Discharge Elimination System
- TSS – total suspended solids

9.3.3 Sampling Data

Sampling results reported on discharge monitoring reports for SPDES Permit No. NY0201260 between 2006 and 2010 that exceeded the permit limits are summarized in the following table (NYSDEC 2011):

Report Year	Constituent	Percent Exceed	Limit	Unit	Minimum	Maximum
2006	Iron, total	11.1	6	mg/L	1.89	6.42
	Mercury, total	11.1	0.0008	mg/L	0.0005	0.000801
	Xylene, mix	11.1	0.05	mg/L	0.006	0.062
	Oil and Grease	22.2	15	mg/L	0.001	23.4
	BOD, 5-day, 20 degrees Celsius	33.3	50	mg/L	7.86	257
	Solids, total suspended	33.3	50	mg/L	15	282
2007	Mercury, total	8.3	0.0008	mg/L	0.0005	0.00157
	Toluene	8.3	0.05	mg/L	0.0005	0.11
	Iron, total	16.7	6	mg/L	0.688	7.85
	Lead, total	16.7	0.5	mg/L	0.038	0.589
	Oil & Grease	16.7	15	mg/L	1	24.1
	BOD, 5-day, 20 degrees Celsius	33.3	50	mg/L	40.6	147
	Solids, total suspended	33.3	50	mg/L	27	1040
2008	Iron, total	8.3	6	mg/L	1.2	7.59
	Lead, total	8.3	0.5	mg/L	0.0363	1.84
	Mercury, total	8.3	0.0008	mg/L	0.0005	0.00233
	Oil and Grease	8.3	15	mg/L	1.4	39.5
	BOD, 5-day, 20 degrees Celsius	16.7	50	mg/L	19.6	485
	Toluene	16.7	0.05	mg/L	0.0004	0.22
	Solids, total suspended	25.0	50	mg/L	6	3078
2009	BOD, 5-day, 20 degrees Celsius	8.3	50	mg/L	20	68.4
	Iron, total	8.3	6	mg/L	1.17	8.54
	Lead, total	8.3	0.5	mg/L	0.0483	0.519
	Mercury, total	8.3	0.0008	mg/L	0.0005	0.000838
	Solids, total suspended	8.3	50	mg/L	20	470
2010	BOD, 5-day, 20 degrees Celsius	8.3	50	mg/L	4.83	74.8
	Lead, total	8.3	0.5	mg/L	0.00755	0.644
	Iron, total	16.7	6	mg/L	0.215	14.1
	Mercury, total	16.7	0.0008	mg/L	0.0005	0.00162
	Oil and Grease	16.7	15	mg/L	1.67	26.7
	Solids, total suspended	25.0	50	mg/L	4	736

Notes:

BOD – biochemical oxygen demand

mg/L – milligrams per liter

SU – standard unit

9.3.4 Surface Water Summary

Since at least 2001, the site was permitted to discharge treated stormwater and wastewater into the adjacent English Kills. In 2009, a permit modification request was submitted to NYSDEC to discharge the treated wastewater to the existing 24-inch NYCDEP sanitary

sewer in Varick Avenue and to permanently seal Outfall 002. Storm drainage from the building roof was still to discharge to English Kills through Outfall 001. Other water which falls on the site is collected via onsite infrastructure and discharged to the NYCDEP sanitary sewer system. No violations were identified in the reviewed records.

9.4 Sediment

Creek Sediment Data Yes No Not Applicable

Information regarding sediment investigations was not identified in documents available for review.

9.5 Air

Air Permit Yes No

Air Data Yes No

A number of NOVs were identified for 1998 to 2000 for excessive dust (Record of Compliance Form – August 31, 2001). No additional information regarding air emissions from the site were identified in documents available for review.

10 REMEDIATION HISTORY (INTERIM REMEDIAL MEASURES AND OTHER CLEANUPS)

Information regarding on-site remedial activities was not identified in documents available for review.

11 BIBLIOGRAPHY/INFORMATION SOURCES

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12 ATTACHMENTS

Figures

Figure 1 Site Vicinity Map: Waste Management of New York – 123 Varick Avenue

Tables

Table 1 Potential Areas of Concern and Transport Pathways Assessment

Supplemental Attachments

Attachment 1 Monitoring Locations (NYSDEC 2001a)

Attachment 2 Sanitary Sewer Connection for Process Area Runoff, Site Plan and Yard Piping (Tams Consultants 1999a)

Table 1

Potential Areas of Concern and Transport Pathways Assessment – Waste Management of New York – 123 Varick Avenue

Potential Areas of Concern	Media Impacted					COPCs													Potential Complete Pathway								
						TPH			VOCs			SVOCs	PAHs	Phthalates	Phenolics	Metals	PCBs	Herbicides and Pesticides						Dioxins/Furans			
	Gasoline-Range	Diesel – Range	Heavier – Range	Petroleum Related (e.g., BTEX)	VOCs	Chlorinated VOCs																					
Description of Areas of Concern	Surface Soil	Subsurface Soil	Groundwater	Catch Basin Solids	Creek Sediment	Gasoline-Range	Diesel – Range	Heavier – Range	Petroleum Related (e.g., BTEX)	VOCs	Chlorinated VOCs	SVOCs	PAHs	Phthalates	Phenolics	Metals	PCBs	Herbicides and Pesticides	Dioxins/Furans	Overland Transport	Groundwater	Direct Discharge – Overwater-	Direct Discharge – Storm/Wastewater	Discharge to Sewer/CSO	Bank Erosion	Air Releases	
C&D debris handling area	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	√	?	?	?	?	?	?	√
ASTs	?	?	?	?	?	?	√	√	?	?	?	√	√	?	?	?	?	?	?	?	?	?	?	?	?	?	?
Site operations – asphalt/pipe fabrication	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	√	?	?	?	?	?	?	?

Notes:

√ – COPCs are/were present in areas of concern having a current or historical pathway that is determined to be complete or potentially complete.

? – There is not enough information to determine if COPC is/was present in area of concern or if pathway is complete.

-- – Current or historical pathway has been investigated and shown to be not present or incomplete.

AST – aboveground storage tank

BTEX – benzene, toluene, ethylbenzene, and xylene

C&D – construction and demolition

COPC – constituent of potential concern

CSO – combined sewer overflow

PAH – polycyclic aromatic hydrocarbon

PCB – polychlorinated biphenyl

SVOC – semi-volatile organic compound

TPH – total petroleum hydrocarbon

VOC – volatile organic compound



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<ul style="list-style-type: none"> ● USEPA Sample Locations (Surface and Subsurface) Shoreline (NYC Dept. of Information Technology, 2006) USGS Nat'l Elev. Dataset 5-foot Contours Selected Site Property Boundary Neighboring Site Property Boundary 	<p>Outfall Class</p> <ul style="list-style-type: none"> ● Direct Discharge ● General ● Highway Drain ● Major Stormwater Outfall ● SPDES ● Storm Drain
---	--

NOTES:

1. Outfall Labeling: BB: Bowery Bay; NC(B/Q): Newtown Creek, Brooklyn/Queens; ST: Stormwater.
2. Outfall locations are preliminary, compiled, estimated data based on New York City Department of Environmental Protection (NYCDEP) maps and tabulated data and other resources. Many outfall locations were taken from the New York City Shoreline Survey Program: Newtown Creek Water Pollution Control Plant Drainage Area, NYCDEP, March 31, 2003. Other locations were taken from an excerpt from a similar report from 2008 (the complete report was not included in files available for review). Finally, some outfall locations were inherited from previous Anchor QEA and Newtown Creek Project work. Latitudinal and longitudinal data provided in the 2003 and 2008 NYCDEP reports were rounded to the nearest second. This resulted in potential outfall location discrepancies of up to approximately 200 feet. All outfall locations are currently under field verification.
3. Aerial Photos: New York State Division of Homeland Security and Emergency Services, 2010.
4. Site Boundaries are based on New York City parcels data.
5. Coarse topographic contours are derived from U.S. Geological Survey 10-meter data.

Feet



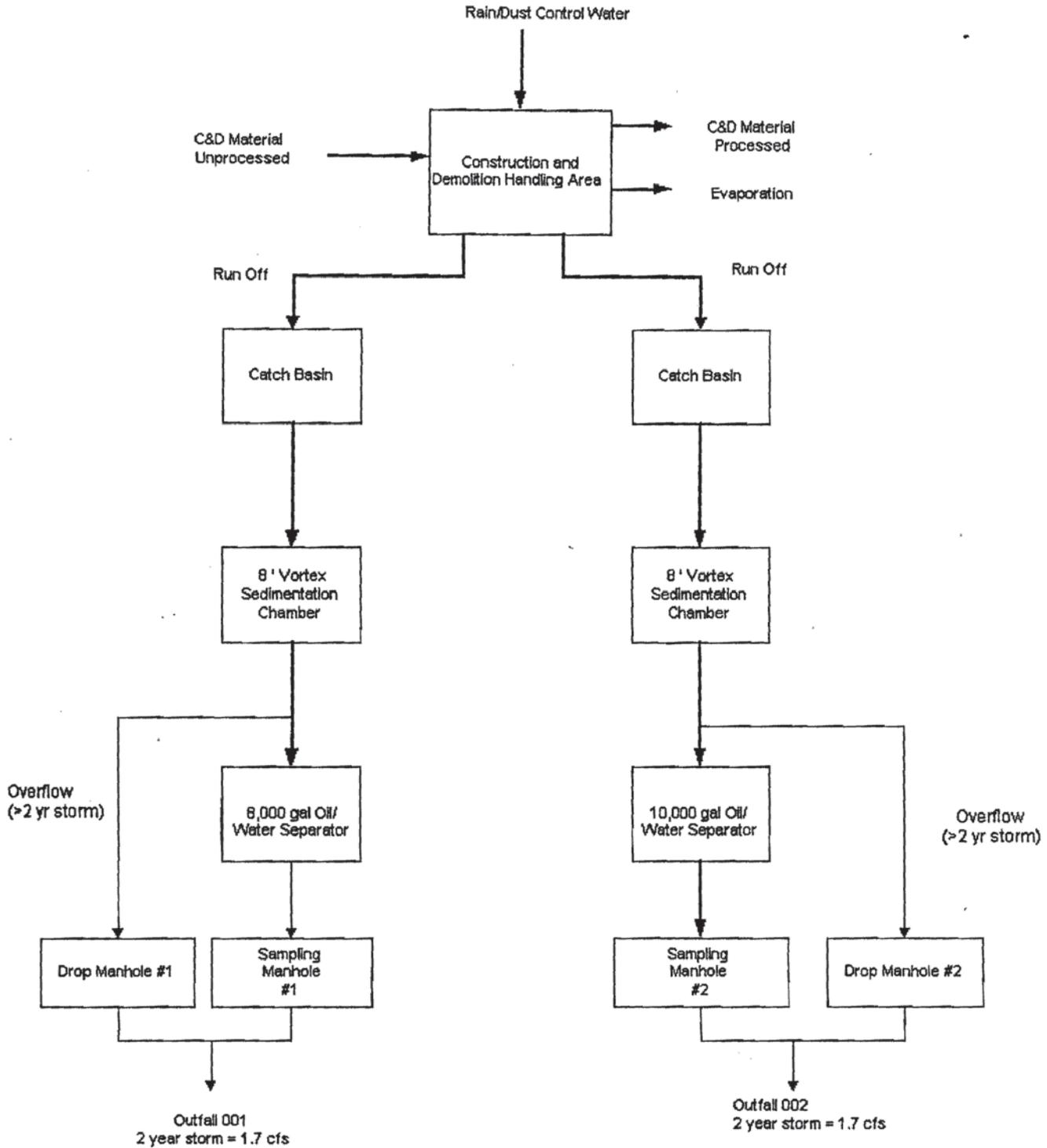
DRAFT

Figure 1
Site Vicinity Map
Draft Upland Site Summary: Waste Management of NY - 123 Varick Avenue
Newtown Creek RI/FS

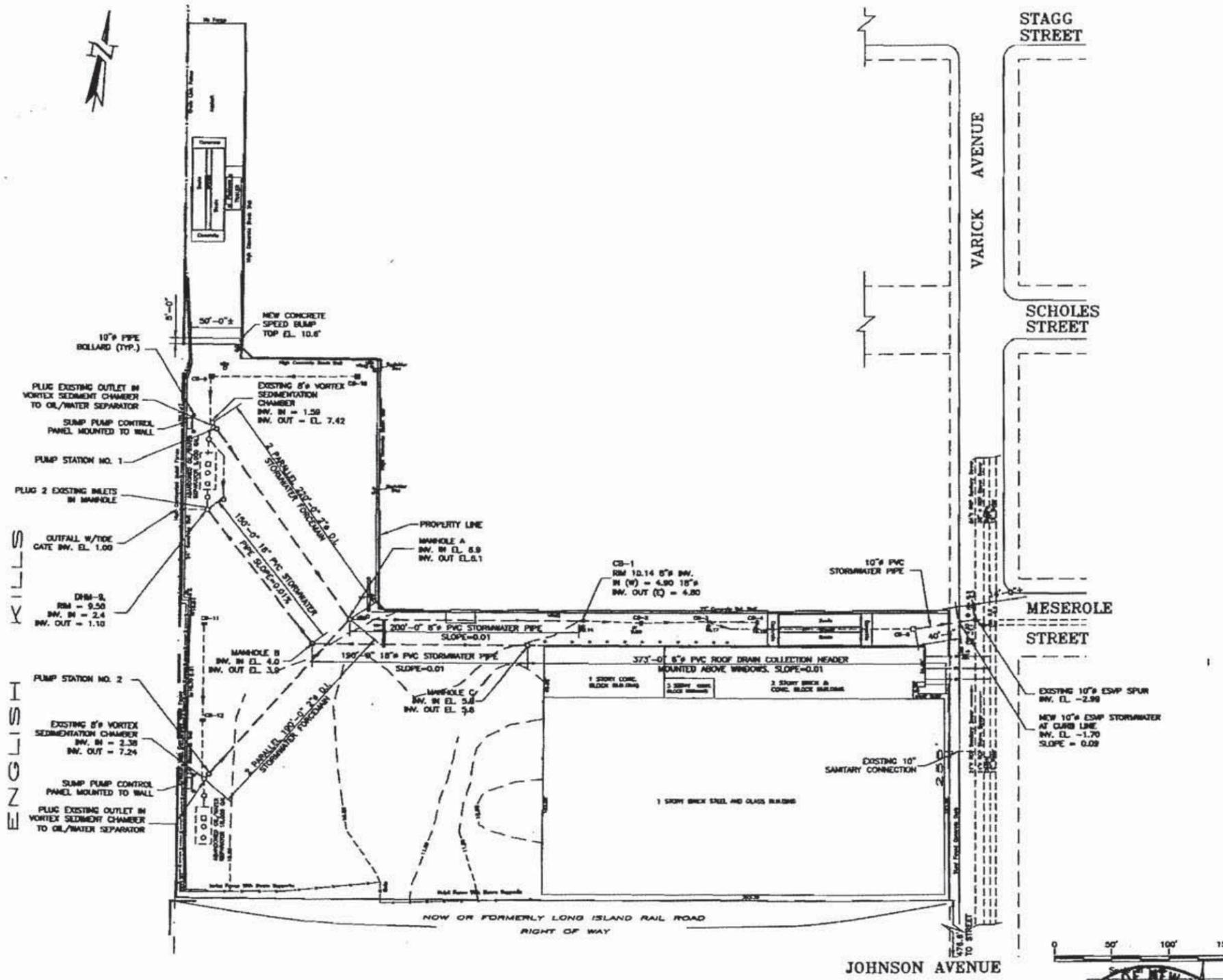
SUPPLEMENTAL ATTACHMENTS

MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location(s) specified below:



Footnotes for this outfall:



REVISION NUMBER	DATE	MADE BY	APPROVED BY	REVISION

SAVIN ENGINEERS, P.C. 3 CAMPUS DRIVE PLEASANTVILLE, NY 10570	WASTE MANAGEMENT OF NEW YORK, LLC 123 VARICK AVENUE BROOKLYN, N.Y. 11237						
		DESIGNED BY: JF DRAWN BY: --- CHECKED BY: --- SUBMITTED BY: ---					
VARICK 2 TRANSFER STATION 123 VARICK AVE. BROOKLYN, NEW YORK							
SANITARY SEWER CONNECTION FOR PROCESS AREA RUNOFF SITE PLAN AND YARD PIPING							
DATE:	9-28-09	SCALE:	1" = 50'	SHEET NO.:	---	DRAWING NO.:	G-1



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Drawing Name: W:\Projects\Varick\Varick-1.dwg
 Project: Varick
 Drawn by: jf
 Date: Oct 06, 2008 - 1:25pm
 File: 11-10-08.dwg